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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MCADAMS, BRAD

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/797,619	Applicant(s) NAGAMI ET AL.	
	Examiner ROBERT B. MCADAMS	Art Unit 2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-14, 16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-14, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the response filed on April 26, 2010.
2. Claims 1, 3-14, 16 and 17 are pending.

Response to Arguments

3. Applicant's arguments filed 4/26/2011 have been fully considered but they are not persuasive. The Applicant argues (pages 8-10) that the combination of *Peiffer* and *Klein* do not teach a traffic control apparatus that includes a managing unit for managing a total reception performance, the total measure reception performance including a sum of measured reception performance of each of the plurality of client apparatuses and controlling whether to relay newly received service request to the server apparatus based on transmission performance and the total measured reception performance. The Examiner respectfully disagrees.

Peiffer discloses a traffic control apparatus (Connection Management Device 20, Figure 1) that relays server requests to and from clients and servers (Figures 3-5, Column 3, Lines 27-33) by controlling whether to relay newly received service requests, based on transmission performance of the server (server response times), and the total measured reception performance of the plurality of client apparatuses (total bandwidth of all connected clients) (Paragraph bridging Columns 7 and 8). In other words, *Peiffer* uses the transmission performance of the server as well as any other type of "performance indicator" to determine whether to open new connections to the servers.

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Peiffer generally states any type of performance indicator can be used, such as total bandwidth of all connected clients, as an example, but does not state the Connection Management Device 20 has a unit for measuring said bandwidth or where said performance indicators comes from although one of ordinary skill in the art would conclude said unit can exist in the Connection Management Device 20. *Klien* is combined with *Peiffer* to show that a unit for measuring client reception is well known in the art and at the time invention it would have obvious to a person of ordinary skill in the art to have combined a client reception performance measuring unit as taught by *Klien* with using the sum of the client reception performance as a performance indicator as taught by *Peiffer*.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 1, 5-6 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Peiffer* (U.S. Patent No. 7,007,092 B2) in view of *Klein* (U.S. Patent No. 6,917,971 B1).

As to **Claims 1 and 11**, *Peiffer* discloses a traffic control apparatus (**Connection Management Device 20, Figure 1, 3-4**) for controlling traffic between a plurality of

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client apparatuses (**12, Figure 1, 3-4**) and a server apparatus (**Server 14, Figure 1, 3**) in a service system including the plurality of client apparatuses for issuing service requests to the server apparatus and the server apparatus for receiving the service requests from the client apparatuses to provide the service (**see figures 1, 3, 4; column 3, lines 26-33 and column 5, lines 41-5**), comprising:

a unit for relaying a service request from a client apparatus to the server apparatus (**Column 3, Lines 27-33**);

a unit for relaying a reply sent from the server apparatus to the client apparatus, the reply being a response to the relayed service request (**Column 3, Lines 27-33**);

a unit for controlling whether to relay of a newly received service request to the server apparatus, based on transmission performance of the server apparatus and a total of the reception performance of the client apparatuses that are being coupled to the server (**Connections to the server are managed by correlating the server response time, “transmission performance”, with performance indicators such as total client bandwidth, “total reception performance”. Column 7, Lines 19-67 and Paragraph bridging Columns 7 and 8**)

However, although *Peiffer* discloses using total bandwidth of all clients connected, “the total measured reception performance” as a performance indicator (**Column 7, Lines 19-67 and Paragraph bridging Columns 7 and 8**) *Peiffer* does not expressly disclose a unit for measuring reception performance of a client apparatus.

Klien, in the same field of endeavor, teaches a unit for measuring reception performance of a client apparatus (**Each interval of time, client event activation**

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through client event completion, is measured. Figure 2; Column 7, Lines 26-54 and paragraph bridging Columns 7 and 8).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine the traffic control apparatus including controlling the number of client apparatuses connected to the server using server performance as taught by *Peiffer* with using the client measuring unit as taught by *Klien* to control the number of connected clients using client performance. The motivation would have been allow the traffic control apparatus to not only to control connections based on server performance, but to control connections based on client performance in order to improve total overall system performance.

As to **Claim 5**, *Peiffer-Klien* teach the traffic control apparatus as discussed in Claim 1. *Klien* further teaches a client performance measurement unit for observing time that the client apparatus receives the service reply to calculate the data reception performance of the client apparatus (**Column 7, Lines 26-54**).

As to **Claim 6**, *Peiffer-Klien* teach the traffic control apparatus as discussed in Claim 1. *Klien* further teaches a client performance measurement unit for observing time that the server apparatus sends the service reply to calculate the data reception performance of the client apparatus (**Column 7, Lines 26-54**).

6. **Claims 3, 10, 13-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,007,092 B2 to *Peiffer* in view of *Klein* (U.S. Patent No. 6,917,971 B1) in further view of *Agrawal* (U.S. Patent No. 6,606,661 B1).

As to **Claim 3**, *Peiffer-Klien* teach a traffic control apparatus according to Claim 1. *Peiffer-Klien* does not expressly disclose a unit for estimating a waiting time and for sending an access restriction message.

Agrawal discloses a unit for estimating a waiting time of the reply supplied by the server apparatus (**MTBR, Column 4, Lines 50-54**); and a unit for sending an access restriction message for rejecting the request when the waiting time is longer than a fixed time (**Column 5, Lines 14-15**).

Peiffer and *Agrawal* are analogous art because they are from the same field of endeavor with respect to traffic control apparatuses.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of *Peiffer* and *Agrawal* to include a unit for restricting access of the client request when the wait time is too great as. The motivation would have been to service the largest possible number of clients without running out of resources (**Column 2, Lines 34-42**).

As to **Claim 10**, *Peiffer-Klien-Agrawal* teach the traffic control apparatus as discussed in Claim 1. *Agrawal* further teaches a unit for providing a maximum processing time of the request to the client apparatus before the request is transferred to the server apparatus (**Tmax, Column 4, Lines 34-38**).

As to **Claim 13**, *Peiffer-Klien-Agrawal* teach the traffic control apparatus as discussed in Claim 11. *Agrawal* further teaches a unit for controlling an average response time to the client apparatus within a fixed time (**G(T), Column 4, Lines 18-30**).

7. **Claims 4, 7-9, and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Peiffer* (U.S. Patent No. 7,007,092 B2) in view of *Klein* (U.S. Patent No. 6,917,971 B1) and further in view of *Miyamoto* (U.S. Patent No. 6,101,542).

As to **Claim 4**, *Peiffer-Klien* teach a traffic control apparatus according to Claim 1. *Peiffer-Klien* does not expressly disclose a unit for changing priority of the requests. *Miyamoto* discloses a unit for changing priority used to relay the request to the server apparatus in accordance with the data reception performance of the client apparatus (**Column 10, Lines 61-64**).

Peiffer-Klien and *Miyamoto* are analogous art because they are from the same field of endeavor with respect to traffic control apparatuses.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of *Peiffer-Klien* and *Miyamoto* to include a unit for prioritizing client requests. The motivation would have been to match the client performance with the performance of the connection from the server apparatus (**Column 4, Lines 7-11**).

As to **Claim 7**, *Peiffer-Klien-Miyamoto* teach the traffic control apparatus as previously discussed in Claim 4. *Miyamoto* further teaches a unit for making access restriction on the request already received from the client apparatus when priority of the request received later is higher than that of the already received request (**Column 12, Lines 21-25**).

As to **Claim 8**, *Peiffer-Klien* teach the traffic control apparatus as previously discussed in Claim 1. *Miyamoto* further teaches a unit for changing priority of the request relayed to the server apparatus in accordance with the data reception performance of the client apparatus (***Miyamoto*; Column 10, Lines 61-64**).

As to **Claim 9**, *Peiffer-Klien-Miyamoto* teach the traffic control apparatus as previously discussed in Claim 8. *Miyamoto* further teaches a unit for controlling an average response time to the client apparatus within a fixed time (**Column 3, Paragraph 3-4**).

As to **Claim 12**, *Peiffer-Klien* teach the traffic control apparatus as previously discussed in Claim 11. *Miyamoto* further teaches a unit for changing priority of the request relayed to the server apparatus in accordance with the data reception performance of the client apparatus (**Column 10, Lines 61-64**).

8. **Claims 16 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Peiffer* (U.S. Patent No. 7,007,092 B2) in view of *Klein* (U.S. Patent No. 6,917,971 B1) and in further view of *Szabo* (U.S. PGPub. No. 2002/0138618).

As to **Claims 16 and 17**, *Peiffer-Klein* teach the traffic control apparatus as previously discussed in Claim 1.

However, *Peiffer-Klien* do not expressly disclose wherein the controlling is based on maximum allowable connections and a sum of current connections.

Szabo, in the same field of endeavor, teaches wherein controlling of the relay of the newly received service request to the server apparatus is further based on maximum allowable connections to the server apparatus and a sum of current connections (**Paragraphs 0010 and 0114**).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to have combined the traffic control apparatus as taught by *Peiffer-Klien* with using maximum connections to control the relay as taught by *Szabo*. The motivation would have been to allow additional metrics to be used to improve overall performance.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT B. MCADAMS whose telephone number is (571)270-3309. The examiner can normally be reached on Monday-Thursday 5:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharra can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. B. M./
Examiner, Art Unit 2456

/KEVIN BATES/
Primary Examiner, Art Unit 2456